FEDERAL BUREAU OF PRISONS CLINICAL PRACTICE GUIDELINES FOR THE TREATMENT OF LATENT TUBERCULOSIS INFECTION (LTBI) AND TUBERCULOSIS DISEASE (ADDENDUM - SEPTEMBER, 2001)

REFERENCES

Update: Fatal and severe liver injuries associated with rifampin and pyrazinamide for latent tuberculosis infection, and revisions in American Thoracic Society/CDC recommendations - United States, 2001, *MMWR* 2001;50(No. 34):733-735.

PROCEDURES

3. Indications for Treatment of LTBI

Treatment of LTBI should be considered for the following inmates who are at risk for TB disease assuming no medical contraindications to treatment exist, and previous adequate treatment has not been provided:

- Recenter convertor status: The inmate has a measured tuberculin skin test that has increased within the past 24 months by ≥10 millimeters. Since relevant medical conditions (such as HIV co-infection) may not be apparent at the time of skin testing, all inmates who have an increase in their skin test reading by 5 millimeters or more during routine screening should be referred to a clinician for further evaluation to determine if treatment of LTBI is medically indicated.

- **High-risk conditions**: Inmates with a tuberculin skin test of **5 millimeters or greater** with the following concurrent conditions that significantly increase the risk of tuberculosis disease:

- Close contact of an active TB case (Note: inmates with HIV infection or other immunocompromised conditions who are close contacts of persons with active TB disease should be considered for treatment of LTBI even if their tuberculin skin test result is zero millimeters with or without evidence of anergy)

- HIV infection, risk factors for HIV infection with unknown HIV serostatus, or other immunocompromised condition

- Systemic corticosteroids or other immunosuppressive therapy (equivalent to 15 mg of prednisone or greater for 3 months or more of treatment)

- Fibrotic changes on chest radiograph suggestive of inactive pulmonary TB (NOTE: must first exclude active TB disease with sputum smears for acid-fast bacilli and bacterial cultures)

- **Co-morbid medical conditions or risk factors**: Inmates with a tuberculin skin test of **10**

millimeters or greater with the following concurrent conditions that increase the risk of tuberculosis disease:

- Foreign-born inmates from a country with a high prevalence of TB disease who have been in the United States for < 5 years

- Injection drug use history

- Chronic renal failure

- Diabetes mellitus

- Silicosis

- Gastrectomy and other specific conditions resulting in nutritional deficiencies

- Head and neck and lung malignancies

- History of incarceration in a correctional facility with a high incidence of TB disease

- Other medical condition associated with TB disease

Inmates with a tuberculin skin test of ≥ 10 millimeters of unknown duration or for more than two years without associated conditions that increase the risk of tuberculosis disease should be considered for treatment of LTBI on a case by case basis while considering the following factors: underlying co-morbid conditions that increase the risk of drug side effects such as liver disease, age, concurrent medications, and other relevant clinical considerations.

Inmates in detention centers should ordinarily not be prescribed LTBI treatment if their anticipated incarceration is uncertain or is less than several months unless the following high priority indications have been identified:

- HIV infection or other immunocompromised condition

- Close contact of an active TB case

- Recent convertor status

4. Treatment of LTBI (Addendum notes: see February, 2001 guidelines for further dosing instructions and information on management of inmates with HIV infection)

- Biweekly or daily isoniazid administered for 6 to 9 months combined with pyridoxine is the preferred treatment regimen for LTBI . Completion of LTBI treatment should be determined by

counting doses of medication taken not solely by duration of treatment, since missed doses may occur. Nine months of isoniazid should be administered when feasible and for all inmates with HIV co-infection.

- Rifampin alone, 10 mg/kg (max: 600 mg) given daily by mouth for 120 doses (4 months) is the preferred treatment option for LTBI for those inmates who can not tolerate isoniazid or have been exposed to isoniazid-resistant active tuberculosis (Note: clinicians must consider potential drug interactions whenever prescribing rifampin).

- Two-month combination therapy with pyrazinamide and rifampin is an alternative treatment option for LTBI, however this treatment regimen should be used with caution, especially for inmates with evidence of liver disease or a history of alcoholism, since severe liver disease is a potential adverse drug effect. Rifampin and pyrazinamide should not be used for inmates who have developed liver enzyme elevations or hepatitis from isoniazid. Inmates prescribed rifampin and pyrazinamide should be assessed by a health care provider at 2, 4, and 6 weeks of treatment for adherence, tolerance of medications, and adverse side effects, and at 8 weeks to assess treatment completion. Serum aminotransferase and bilirubin levels should be measured at 2, 4, and 6 weeks of treatment. Inmates should be advised to seek medical attention if they develop jaundice, abdominal pain, emesis, or other symptoms of liver disease. Rifampin and pyrazinamide should be discontinued in asymptomatic inmates if aminotransferase levels increase to greater than 5 times the upper limit of normal; or if aminotransferase or bilirubin levels increase greater than normal and are associated with symptoms of hepatitis.